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CBRN APR Test Matrix

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Test Matrix for CBRN Air Purifying Respirators

Test Order	Penetration and Permeation Testing	Particulate Testing	Service Life Testing, 64 lpm flow	Service Life Testing, high flow	42 CFR Testing	Drop (not order specific)	Human Factors (not order specific)	<u>Interchangeability</u>
	6 APR systems (3 - GB and 3 - HD)	60 canister units	60 canister units	12 canister units	TBD APR systems	6 Canister Units (2 per test)	APR Systems --TBD -- (2 APR systems per test)	APR Systems --TBD --
1.	Hot diurnal	Hot diurnal	Hot diurnal	Service Life Testing, 100 LPM	Canister in Parallel Resistance Requirements, 84.112	Major axis vertical, air inlet down	Hydration ⁽³⁾	EN 136 & EN 148
2.	Cold constant	Cold constant	Cold constant		Breathing Tube, 84.115	Major axis vertical, air inlet up	Optical Haze	
3.	Humidity	Humidity	Humidity		Facepieces; eyepieces minimum requirements, 84.119	Major axis horizontal	Communications	
4.	Transportation vibration	Transportation vibration	Transportation vibration		Exhalation valve leakage test, 84.123 ⁽²⁾		Field of View	
5.	System testing (GB or HD)	Initial breathing resistance, 84.122	Initial breathing resistance, 84.122		Determine CO ₂ levels ⁽⁴⁾		Donning	
6.		DOP Testing, 84.181	Service Life Testing, 64 LPM				Fogging	
7.		Final breathing resistance, 84.122	Final breathing resistance, 84.122				LRPL Testing	